

Down's Syndrome

Defect – autosomal disorder (extra copy of chromosome 21)

Symptoms:

- Have delayed mental and social development.
- Happy

Common problems may include:

- Poor judgment
- Short attention span
- Slow learning



Down's Syndrome

- Disorder is also called trisomy 21. Have an extra 21st chromosome
- The older the mother, the chances of having a baby with Down's Syndrome increases
 - Age 20, 1 in 1500
 - Age 40, 1 in 60

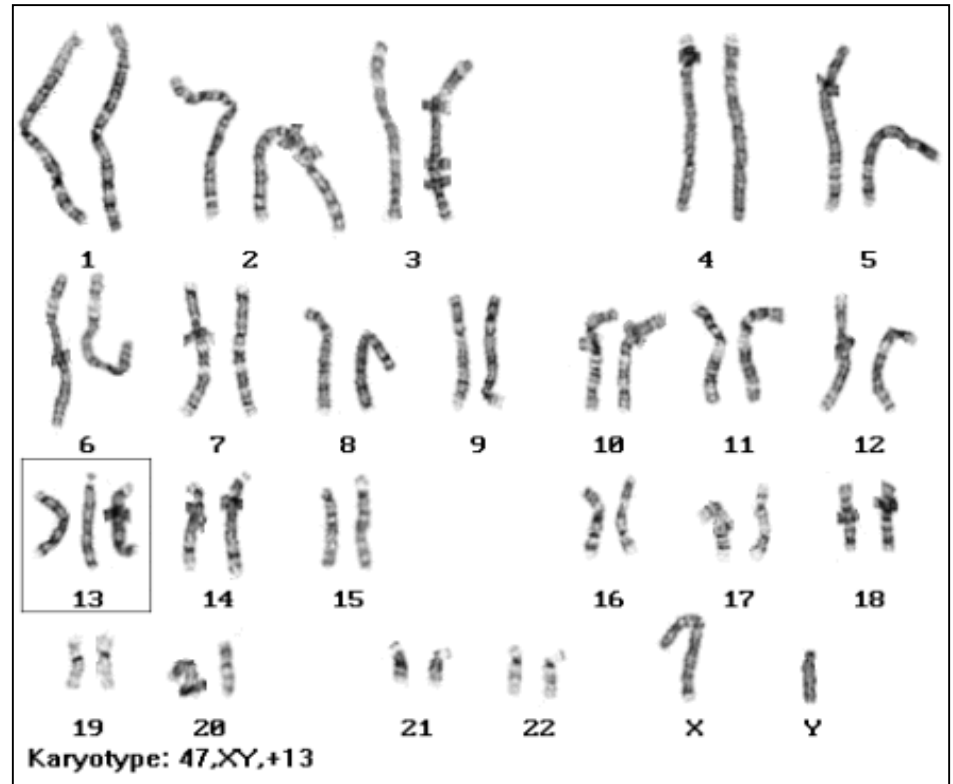
Dominant or Recessive?

- Neither! Due to nondisjunction.



Patau Syndrome

- Disorder is also called trisomy 13. Have an extra 13th chromosome
- More than 80% of children with Patau syndrome die within the first year of life.



Patau Syndrome

Defect - autosomal disorder (extra copy of chromosome 13)

Symptoms:

- Cleft lip or palate
- Close-set eyes -- eyes may actually fuse together into one
- Decreased muscle tone
- Extra fingers or toes
- Scalp defects (missing skin)
- Seizures
- Limb abnormalities
- Intellectually Disabled



Turner's Syndrome- XO

Defect – XO (missing a sex Chromosome)

Symptoms:

- May be intellectually disabled, some have normal IQ
- Short stature
- Sterile (cannot have kids)
- Webbed neck
- Underdeveloped breasts and ovaries



Turner's Syndrome- XO

- Disorder is caused by non-disjunction (when the sister chromatids aren't pulled apart)
- Occurs 1 in 2,500



Klinefelter's Syndrome- XXY

Defect – XXY-Male with an extra X chromosome in some cells

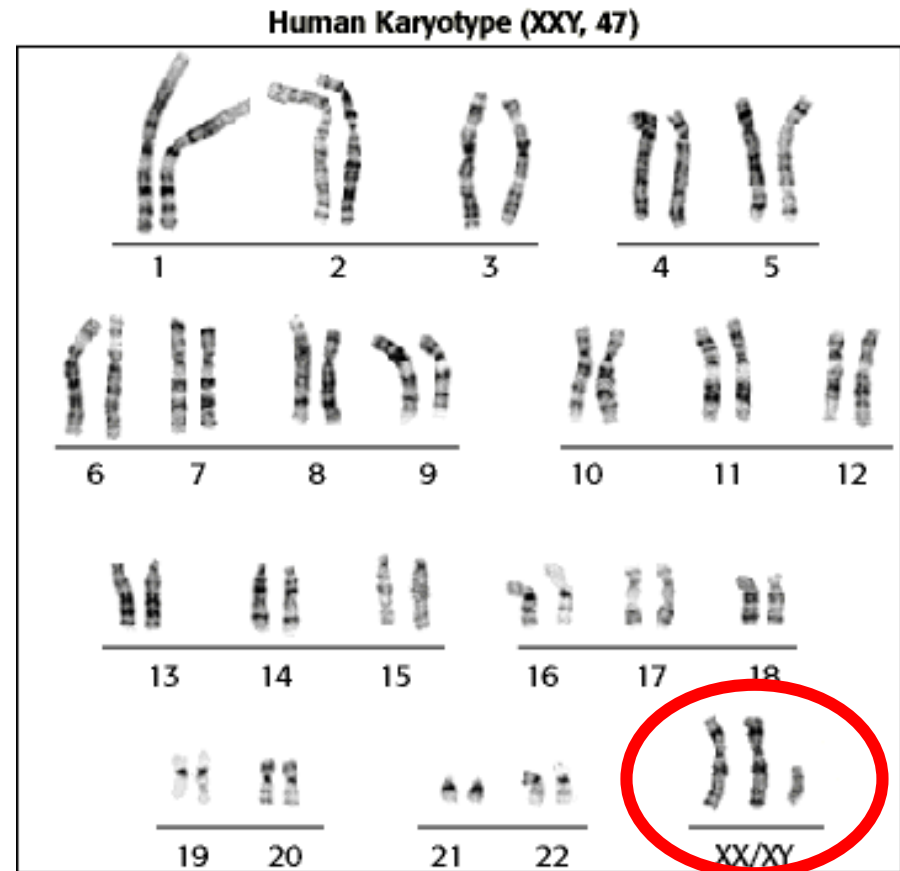
Symptoms:

- Underdeveloped testes
- Inability to produce sperm
- Muscle structure, fat and hair distribution similar to that of a female
- Breasts develop



Klinefelter's Syndrome- XXY

- Occurs 1 in 400 males
- Often goes undiagnosed.
- Caused by nondisjunction. (when the sister chromatids aren't pulled apart)
- Can be treated with male hormones.

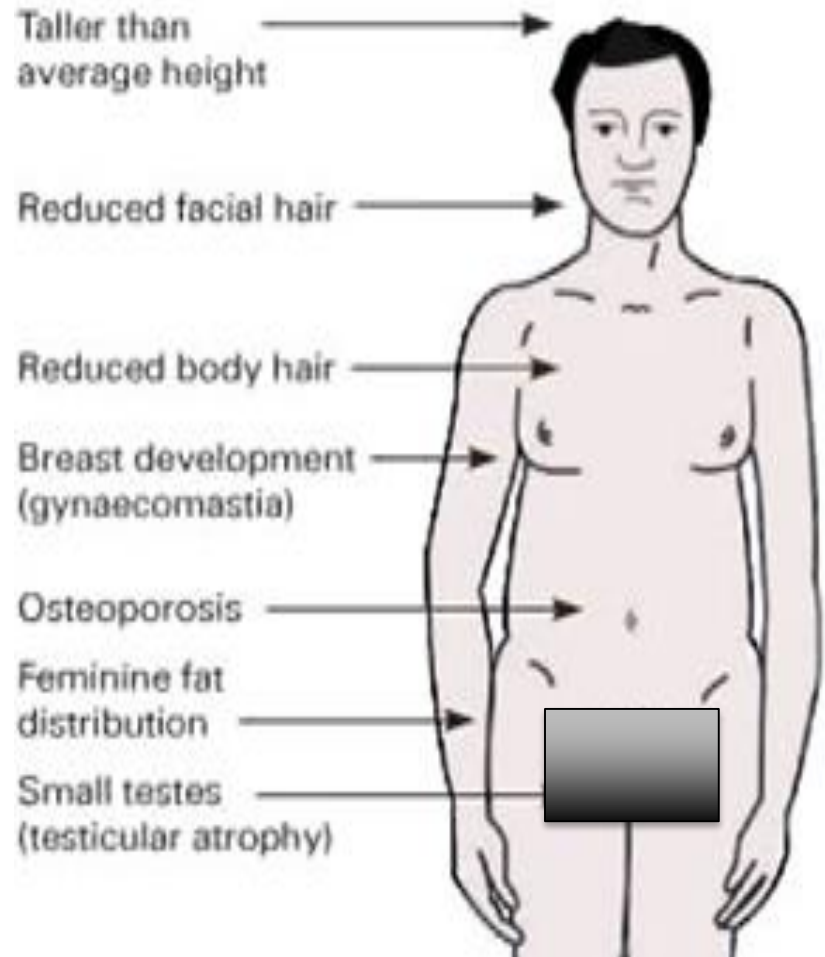


Double Y syndrome- XYY

Defect – Chromosomal mutation – XYY

Symptoms:

- Often less than average IQ
- Tall
- High levels of male hormones
- Large ears
- Sunken chest
- Delayed speech and language skills



Double Y syndrome- XYY

- Occurs 1 in 250 males
- May be linked to violent tendencies

